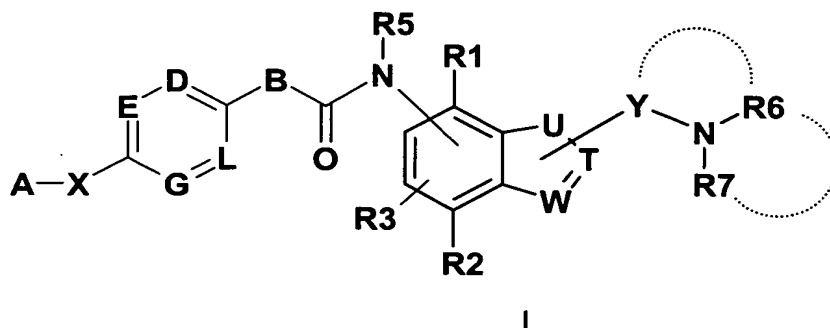


## CLAIMS

What is claimed is:

1. A compound of formula I,



in which

10 A is (C<sub>1</sub>-C<sub>8</sub>)alkyl, (C<sub>0</sub>-C<sub>8</sub>)alkylenearyl; a 3- to 12-membered mono- or bicyclic ring which may contain one or more heteroatoms selected from the group consisting of N, O and S and the 3- to 12-membered ring may carry further substituents selected from the group consisting of F, Cl, Br, NO<sub>2</sub>, CF<sub>3</sub>, OCF<sub>3</sub>, CN, (C<sub>1</sub>-C<sub>6</sub>)alkyl, aryl, CON(R<sub>37</sub>)(R<sub>38</sub>), N(R<sub>39</sub>)(R<sub>40</sub>), OH, O-(C<sub>1</sub>-C<sub>6</sub>)alkyl, S-(C<sub>1</sub>-C<sub>6</sub>)alkyl, and NHCO(C<sub>1</sub>-C<sub>6</sub>)alkyl;

X is a bond, C(R<sub>8</sub>)(R<sub>9</sub>), C(OR<sub>10</sub>)(R<sub>11</sub>), O, N(R<sub>12</sub>), S, SO, SO<sub>2</sub>, or CO;

20 R<sub>8</sub>, R<sub>9</sub>, R<sub>10</sub>, R<sub>11</sub>, R<sub>12</sub> are independently of one another H, or (C<sub>1</sub>-C<sub>6</sub>)alkyl;

D is N, or C(R<sub>41</sub>);

E is N, or C(R<sub>42</sub>);

25 G is N, or C(R<sub>43</sub>);

L is N, or C(R<sub>44</sub>);

R1, R2, R3, R41, R42, R43, R44 are independently of one another H, F, Cl, Br, J, OH, CF<sub>3</sub>, NO<sub>2</sub>, CN, OCF<sub>3</sub>, O-(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>4</sub>)alkoxyalkyl, S-(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>2</sub>-C<sub>6</sub>)alkenyl, (C<sub>3</sub>-C<sub>8</sub>)cycloalkyl, O-(C<sub>3</sub>-C<sub>8</sub>)cycloalkyl, (C<sub>3</sub>-C<sub>8</sub>)cycloalkenyl, O-(C<sub>3</sub>-C<sub>8</sub>)cycloalkenyl, (C<sub>2</sub>-C<sub>6</sub>)alkynyl, (C<sub>0</sub>-C<sub>8</sub>)alkylenearyl, -O-(C<sub>0</sub>-C<sub>8</sub>)alkylenearyl, S-aryl, N(R13)(R14), SO<sub>2</sub>-CH<sub>3</sub>, COOH, COO-(C<sub>1</sub>-C<sub>6</sub>)alkyl, CON(R15)(R16), N(R17)CO(R18), N(R19)SO<sub>2</sub>(R20), CO(R21), or a 5- to 7-membered heterocycle having 1-4 heteroatoms;

R13, R14 are independently of one another H, (C<sub>1</sub>-C<sub>6</sub>)alkyl, or R13 and R14 together with the nitrogen atom to which they are bonded form a 5- to 6-membered ring, where, in the case of the 6-membered ring, a CH<sub>2</sub> group may be replaced by O or S;

R15, R16 are independently of one another H, (C<sub>1</sub>-C<sub>6</sub>)alkyl, or R15 and R16 together with the nitrogen atom to which they are bonded form a 5- to 6-membered ring, where, in the case of the 6-membered ring, a CH<sub>2</sub> group may be replaced by O or S;

R17, R19 are independently of one another H, or (C<sub>1</sub>-C<sub>6</sub>)alkyl;

R18, R20, R21 are independently of one another (C<sub>1</sub>-C<sub>6</sub>)alkyl, or aryl;

B is N(R24), or O;

R24 is H, or (C<sub>1</sub>-C<sub>6</sub>)alkyl;

R5 is H, or (C<sub>1</sub>-C<sub>6</sub>)alkyl;

W is N, or C(R25);

R25 is H, (C<sub>1</sub>-C<sub>6</sub>)alkyl, aryl, or a bond to Y;

T is N, or C(R26);

R26 is H, (C<sub>1</sub>-C<sub>6</sub>)alkyl, aryl, (C<sub>0</sub>-C<sub>8</sub>)alkylenearyl, or a bond to Y;

5 U is O, S, N(R27), -C(R30)=N-, or -N=C(R31)-;

R27, R30, R31 are independently of one another H, (C<sub>1</sub>-C<sub>6</sub>)alkyl, or a bond to Y;

10 Y is (C<sub>1</sub>-C<sub>8</sub>)alkylene, in which one or more carbons may be replaced by O, S, SO, SO<sub>2</sub>, C(R32)(R33), CO, C(R34)(OR35) or N(R36);

R32, R33, R34, R35, R36 are independently of one another H, (C<sub>1</sub>-C<sub>6</sub>)alkyl, or aryl;

15

R6, R7 are independently of one another H, (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, or R6 and Y or R6 and R7 together with the nitrogen atom to which they are bonded form a 3- to 8-membered ring in which one or more carbons may be replaced by O, N or S and the 3- to 8-membered ring may carry further  
20 substituents such as (C<sub>1</sub>-C<sub>6</sub>)alkyl, aryl, CON(R37)(R38), N(R39)(R40), OH, O-(C<sub>1</sub>-C<sub>6</sub>)alkyl or NHCO(C<sub>1</sub>-C<sub>6</sub>)alkyl;

R37, R38, R39, R40 are independently of one another H, or (C<sub>1</sub>-C<sub>6</sub>)alkyl;

25 and the physiologically acceptable salts thereof.

2. A compound of formula I as claimed in claim 1, wherein

30 A is (C<sub>2</sub>-C<sub>7</sub>)alkyl, (C<sub>0</sub>-C<sub>3</sub>)alkylenearyl; a 4- to 10-membered mono- or bicyclic ring which may contain one or more heteroatoms selected from the group consisting of N, O and S, and the 4- to 10-membered ring may carry further substituents selected from the group consisting of F, Cl, Br, NO<sub>2</sub>, CF<sub>3</sub>, (C<sub>1</sub>-C<sub>6</sub>)alkyl, aryl, CON(R37)(R38), N(R39)(R40), O-(C<sub>1</sub>-C<sub>6</sub>)alkyl, and NHCO(C<sub>1</sub>-C<sub>6</sub>)alkyl;

X is a bond, C(R8)(R9), O, N(R12), S, or SO<sub>2</sub>;

R8, R9, R12 are independently of one another H, or (C<sub>1</sub>-C<sub>6</sub>)alkyl;

5

D is N, or C(R41);

E is N, or C(R42);

10

G is N, or C(R43);

L is N, or C(R44);

15

where the total number of the nitrogen atoms defined by D, E, G and L is 0, 1 or 2;

20

R1, R2, R3, R41, R42, R43, R44 are independently of one another H, F, Cl, Br, CF<sub>3</sub>, NO<sub>2</sub>, O-(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>3</sub>-C<sub>8</sub>)cycloalkyl, O-(C<sub>3</sub>-C<sub>8</sub>)cycloalkyl, (C<sub>2</sub>-C<sub>6</sub>)alkynyl, (C<sub>0</sub>-C<sub>8</sub>)alkylenearyl, -O-(C<sub>0</sub>-C<sub>3</sub>)alkylenearyl, S-aryl, N(R13)(R14), SO<sub>2</sub>-CH<sub>3</sub>, COO-(C<sub>1</sub>-C<sub>6</sub>)alkyl, CON(R15)(R16), N(R17)CO(R18), N(R19)SO<sub>2</sub>(R20), or CO(R21);

25

R13, R14 are independently of one another H, (C<sub>1</sub>-C<sub>6</sub>)alkyl, or R13 and R14 together with the nitrogen atom to which they are bonded form a 5- to 6-membered ring, where, in the case of the 6-membered ring, a CH<sub>2</sub> group may be replaced by O or S;

30

R15, R16 are independently of one another H, (C<sub>1</sub>-C<sub>6</sub>)alkyl, or R15 and R16 together with the nitrogen atom to which they are bonded form a 5- to 6-membered ring, where, in the case of the 6-membered ring, a CH<sub>2</sub> group may be replaced by O or S;

R17, R19 are independently of one another H, or (C<sub>1</sub>-C<sub>6</sub>)alkyl;

R18, R20, R21 are independently of one another (C<sub>1</sub>-C<sub>6</sub>)alkyl, or aryl;  
  
 B is N(R24), or O;  
 5  
 R24 is H, or (C<sub>1</sub>-C<sub>6</sub>)alkyl;  
  
 R5 is H, or (C<sub>1</sub>-C<sub>6</sub>)alkyl;  
  
 10 W is N, or C(R25);  
  
 R25 is H, (C<sub>1</sub>-C<sub>6</sub>)alkyl, or aryl;  
  
 T is C(R26);  
 15  
 R26 is H, (C<sub>1</sub>-C<sub>6</sub>)alkyl, aryl, or a bond to Y;  
  
 U is O, S, N(R27), or -N=C(R31)-;  
  
 20 R27, R31 are independently of one another H, (C<sub>1</sub>-C<sub>6</sub>)alkyl, or a bond to Y;  
  
 Y is (C<sub>1</sub>-C<sub>4</sub>)alkylene, in which a carbon may be replaced by SO<sub>2</sub>,  
 C(R32)(R33), CO or N(R36);  
  
 25 R32, R33, R36 are independently of one another H, (C<sub>1</sub>-C<sub>6</sub>)alkyl, or aryl;  
  
 R6, R7 are independently of one another H, (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>3</sub>-C<sub>7</sub>)cycloalkyl,  
 or R6 and Y or R6 and R7 together with the nitrogen atom to which they are  
 bonded form a 4- to 7-membered ring in which one or more carbons may be  
 30 replaced by O, N or S and the 4- to 7-membered ring may carry further  
 substituents selected from the group consisting of (C<sub>1</sub>-C<sub>6</sub>)alkyl, aryl,  
 CON(R37)(R38), N(R39)(R40), OH and NHCO(C<sub>1</sub>-C<sub>6</sub>)alkyl;

R37, R38, R39, R40 are independently of one another H, or (C<sub>1</sub>-C<sub>6</sub>)alkyl;

and the physiologically acceptable salts thereof.

5           3.     A compound of formula I as claimed in either of claims 1 and 2,  
wherein

10           A     is (C<sub>3</sub>-C<sub>7</sub>)alkyl, (C<sub>0</sub>-C<sub>2</sub>)alkylenearyl; a 5- to 10-membered mono- or  
bicyclic ring which may contain 0, 1 or 2 heteroatoms selected from the group  
consisting of N, O and S, and the 5- to 10-membered ring may carry further  
substituents selected from the group consisting of F, Cl, Br, NO<sub>2</sub>, CF<sub>3</sub>, (C<sub>1</sub>-C<sub>6</sub>)alkyl,  
aryl, O-(C<sub>1</sub>-C<sub>6</sub>)alkyl and NHCO(C<sub>1</sub>-C<sub>6</sub>)alkyl;

15           X     is a bond, C(R8)(R9), O, or N(R12);

R8, R9, R12 are independently of one another H, or (C<sub>1</sub>-C<sub>6</sub>)alkyl;

D     is N, or C(R41);

20           E     is N, or C(R42);

G     is N, or C(R43);

25           L     is N, or C(R44);

where the total number of the nitrogen atoms defined by D, E, G and L is 0  
or 1;

30           R1, R2, R3, R41, R42, R43, R44 are independently of one another H, F, Cl,  
CF<sub>3</sub>, NO<sub>2</sub>, O-(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkyl, O-(C<sub>3</sub>-C<sub>8</sub>)cycloalkyl, (C<sub>0</sub>-C<sub>2</sub>)alkylenearyl, -  
O-(C<sub>0</sub>-C<sub>3</sub>)alkylenearyl, N(R13)(R14), COO-(C<sub>1</sub>-C<sub>6</sub>)alkyl, CON(R15)(R16),  
N(R17)CO(R18), N(R19)SO<sub>2</sub>(R20), or CO(R21);

R13, R14 are independently of one another H, or (C<sub>1</sub>-C<sub>6</sub>)alkyl,  
R15, R16 are independently of one another H, or (C<sub>1</sub>-C<sub>6</sub>)alkyl,  
5 R17, R19 are independently of one another H, or (C<sub>1</sub>-C<sub>6</sub>)alkyl;  
R18, R20, R21 are independently of one another (C<sub>1</sub>-C<sub>6</sub>)alkyl, or aryl;  
B is N(R24);  
10 R24 is H, or (C<sub>1</sub>-C<sub>6</sub>)alkyl;  
R5 is H, or (C<sub>1</sub>-C<sub>6</sub>)alkyl;  
15 W is N, or C(R25);  
R25 is H, or (C<sub>1</sub>-C<sub>6</sub>)alkyl;  
T is C(R26);  
20 R26 is H, (C<sub>1</sub>-C<sub>6</sub>)alkyl, or a bond to Y;  
U is O, S, or N(R27);  
25 R27 is H, (C<sub>1</sub>-C<sub>6</sub>)alkyl, or a bond to Y;  
Y is (C<sub>1</sub>-C<sub>3</sub>)alkylene, in which a carbon may be replaced by SO<sub>2</sub>,  
C(R32)(R33) or CO;  
30 R32, R33 are independently of one another H, (C<sub>1</sub>-C<sub>6</sub>)alkyl, or aryl;  
R6, R7 are independently of one another H, (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>3</sub>-  
C<sub>7</sub>)cycloalkyl, or R6 and Y or R6 and R7 together with the nitrogen atom to which

they are bonded form a 5- or 6-membered ring in which one or more carbons may be replaced by O or N and the 5- or 6-membered ring may carry further substituents selected from the group consisting of (C<sub>1</sub>-C<sub>6</sub>)alkyl, aryl, CON(R37)(R38), N(R39)(R40), OH and NHCO(C<sub>1</sub>-C<sub>6</sub>)alkyl;

5

R37, R38, R39, R40 are independently of one another H, or (C<sub>1</sub>-C<sub>6</sub>)alkyl;

and the physiologically acceptable salts thereof.

10

4. A pharmaceutical composition comprising one or more of the compounds as claimed in claim 1 and a physiologically acceptable carrier.

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5. A pharmaceutical composition comprising one or more of the compounds as claimed in claim 1, one or more anorectic active substances and a physiologically acceptable carrier.

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6. A method for the prophylaxis or treatment of obesity comprising administering to a mammal in need thereof an effective amount of a compound as claimed in claim 1, or a physiologically acceptable salt thereof.

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7. A method for the prophylaxis or treatment of type II diabetes comprising administering to a mammal in need thereof an effective amount of a compound as claimed in claim 1, or a physiologically acceptable salt thereof.

8. The method of claim 6, further comprising administering an effective amount of an anorectic active substance.

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9. The method of claim 7, further comprising administering an effective amount of an anorectic active substance.

10. A method for preparing a pharmaceutical comprising one or more of the compounds as claimed claim 1, which comprises mixing the active substance



with a pharmaceutically suitable carrier and bringing said mixture into a form suitable for administration.

5        11.    A method for the prophylaxis or treatment of arteriosclerosis or high blood pressure comprising administering to a mammal in need thereof an effective amount of a compound as claimed in claim 1, or a physiologically acceptable salt thereof.

10       12.    A method for normalizing lipid metabolism comprising administering to a mammal in need thereof an effective amount of a compound as claimed in claim 1, or a physiologically acceptable salt thereof.

15       13.    A method for the prophylaxis or treatment of paresthesia, depression, anxiety, anxiety neuroses, or schizophrenia comprising administering to a mammal in need thereof an effective amount of a compound as claimed in claim 1, or a physiologically acceptable salt thereof.

20       14.    A method for the prophylaxis or treatment of disorders associated with the circadian rhythm comprising administering to a mammal in need thereof an effective amount of a compound as claimed in claim 1, or a physiologically acceptable salt thereof.

25       15.    A method for the treatment of drug abuse comprising administering to a mammal in need thereof an effective amount of a compound as claimed in claim 1, or a physiologically acceptable salt thereof.